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WASHINGTON, D. C., *June 1, 1904.*

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GEO. WM. HILL,
Editor and Chief.

BULLETINS AND CIRCULARS FOR FREE DISTRIBUTION.

FARMERS' BULLETINS.

No. 16.—Leguminous Plants for Green Manuring and for Feeding.
Pp. 24.

CONTENTS: Green manuring—How plants get nitrogen from the air—Some crops for green manuring—Composition of green leguminous crops—Green manuring compared with feeding the crops—Alfalfa and crimson clover for feeding—Cowpeas for feeding—Advantages of soiling—Value of leguminous crops for feeding.

No. 22, second revision.—The Feeding of Farm Animals. Pp. 40.

CONTENTS: Principles of feeding—Composition of the animal body—Composition and digestibility of feeding stuffs—Feeding standards for different kinds of animals—Calculation of rations—Selection of feeding stuffs—Preparation of food for animals—Feeding for fat and for lean—Wheat as a food for animals—Table showing composition of feeding stuffs.

No. 24.—Hog Cholera and Swine Plague. Pp. 16.

CONTENTS: General characters—Symptoms—Appearance on post-mortem examination—The cause of these diseases—Diagnosis and prognosis—Formula for remedy for hog cholera and swine plague—Prevention of disease by proper breeding and feeding.

No. 25.—Peanuts: Culture and uses. Pp. 24, fig. 1.

CONTENTS: Description and history—Composition—Varieties—Climate and soil suitable for peanut culture—Manuring—Culture—Harvesting—Uses.

No. 27.—Flax for Seed and Fiber in the United States. Pp. 16.

CONTENTS: Can both seed and fiber be saved?—Soil selection and preparation—Fertilizing—Rotation—Kind and quantity of seed to sow—Weeds—Harvesting the fiber—Saving the seed—Retting the straw—The “American practice.”

No. 28, revised.—Weeds: And How to Kill them. Pp. 32, figs. 11.

CONTENTS: General methods of eradicating weeds—List of weeds attracting special attention during 1894—Table of one hundred weeds.

No. 29.—Souring of Milk and Other Changes in Milk Products. Pp. 23.

CONTENTS: Composition of milk—Causes of fermentation—Sources, number, and kinds of dairy bacteria—The souring of milk—Supposed effect of thunderstorms—Other forms of fermentation—Fermentation of milk by rennet.

No. 30.—Grape Diseases on the Pacific Coast. Pp. 15, figs. 3.

CONTENTS: California vine disease—Powdery mildew—Coulure.

No. 31, second revision.—Alfalfa, or Lucern. Pp. 24, figs. 3.

CONTENTS: Name—History—Description—Varieties—Habits of growth—Preparation of the soil—Sowing the seed—Alfalfa hay—Feeding value—Soiling vs. pasturing—Alfalfa for hogs—Alfalfa in the orchard—Chemical composition—Alfalfa as a soil renovator—Destroying alfalfa—Enemies of alfalfa.

No. 32, revised.—Silos and Silage. Pp. 32, figs. 6.

CONTENTS: Historical—Construction and cost of silos—Selection and culture of silage crops—Filling the silo—Cost of silage—Composition and feeding value of silage—Feeding silage to farm stock.

No. 33.—Peach Growing for Market. Pp. 24, figs. 21.

CONTENTS: Where peaches can be grown—Planting within easy reach of large markets—Extent of peach lands in the United States—Planting and cultivation of the orchard—Pruning—Fertilizers—Fungous diseases and insect pests—Spraying, washing, etc.—Picking and marketing the fruit—Gluts in the market—Hindrances to profitable peach culture.

No. 34.—Meats: Composition and Cooking. Pp. 29, figs. 4.

CONTENTS: Animal and vegetable foods compared—Structure, composition, texture (toughness), flavor, and digestibility of meats—The cooking of meats—Cuts of meats—Fuel value of meats.

No. 35.—Potato Culture. Pp. 24, figs. 2.

CONTENTS: Soil and rotation—Manuring—Varieties—Time to cut seed potatoes—Quantity of seed potatoes per acre—Weight and number of eyes per set—Number of cuttings and stalks per hill—Cultivation—Mulching—Harvesting and storing—Second-crop potatoes.

No. 36.—Cotton Seed and Its Products. Pp. 16.

CONTENTS: Cotton seed—Method of manufacturing cotton-seed products—Cotton-seed oil, meal, and hulls—Cotton-seed-hull ash—Feeding cotton-seed products to farm stock—Effect on health of animals.

No. 37.—Kafir Corn: Characteristics, Culture, and Uses. Pp. 12, fig. 1.

CONTENTS: Varieties—Soils and climate—Preparation of the soil—Methods of seeding—Cultivation and harvesting—Yield—Composition—Practical feeding tests.

No. 38.—Spraying for Fruit Diseases. Pp. 12, figs. 6.

CONTENTS: Fungicides, or remedies for plant diseases—Applying fungicides—Treatment of grape, apple, pear, quince, cherry, and plum diseases.

No. 39.—Onion Culture. Pp. 31, figs. 3.

CONTENTS: Selection and preparation of soil—Fertilizing—Seed and varieties—Growing onions from sets and from seeds sown in the field—Transplanting—Cultivation and weeding—Irrigation—Harvesting—Storing—Production of seed—Two important enemies of the onion.

No. 41.—Fowls: Care and Feeding. Pp. 24, figs. 4.

CONTENTS: Site for building and yards—Construction of houses—Perches, nests, drinking fountains, dust boxes, etc.—Breeds and breeding—Feeding—Brooders and incubators—Diseases and lice—Dressing and shipping.

No. 42.—Facts about Milk. Pp. 29, figs. 8.

CONTENTS: The dairy industry—Composition and causes of variation in milk—Difficulties in obtaining pure milk—Changes in milk—Care of Milk—Detecting impure milk—Town and city milk supply.

No. 43.—Sewage Disposal on the Farm and the Protection of Drinking Water. Pp. 20, figs. 8.

CONTENTS: Methods of disposal of different kinds of sewage—Protection of drinking water—Ways of contamination of water—Construction of wells.

No. 44.—Commercial Fertilizers: Composition and Use. Pp. 24.

CONTENTS: Need of commercial fertilizers—Fertilizer requirements of different soils and crops—Forms, sources, and composition of fertilizing materials—Agricultural vs. commercial value of fertilizers—Purchase of fertilizers and conditions under which they may be properly used—Kinds to use—How to apply.

No. 45, revised.—Some Insects Injurious to Stored Grain. Pp. 24, figs. 18.

CONTENTS: Grain weevils—Grain moths—Flour and meal moths—Flour beetles—Meal worms—Grain beetles—The cadelle—Parasites and natural enemies—Methods of control: Preventive measures; insecticides and other destructive agencies; the bisulphid of carbon treatment; summary of principal remedies.

No. 46.—Irrigation in Humid Climates. Pp. 27, figs. 4.

CONTENTS: The advantages of an abundant supply of soil moisture—The rainfall of the growing season in the United States is insufficient for maximum yield—Extent of irrigation in the humid parts of Europe—The rainfall of Europe and the Eastern United States compared—Fertilizing value of irrigation waters—Lands best suited to irrigation in humid climates—Methods of obtaining water for irrigation—The construction of reservoirs—Methods of applying irrigation water.

No. 47.—Insects Affecting the Cotton Plant. Pp. 32, figs. 18.

CONTENTS: The Cotton worm, or cotton caterpillar—The cotton bollworm—The Mexican cotton-boll weevil—Other cotton insects.

No. 48.—The Manuring of Cotton. Pp. 16.

CONTENTS: The draft of the cotton plant upon the fertility of the soil—Experiments in the manuring of cotton.

No. 49.—Sheep Feeding. Pp. 24.

CONTENTS: Feeding breeding ewes—Feeding lambs intended for breeding purposes—Feeding lambs for market.

No. 50, revised.—Sorghum as a Forage Crop. Pp. 20, fig. 1.

CONTENTS: General characteristics and origin—Extent of cultivation in the United States—Varieties—Conditions of growth—Methods of culture—Yield—Value of forage—Chemical composition and digestibility—Objections sometimes urged against sorghum as a forage crop.

No. 51, revised.—Standard Varieties of Chickens. Pp. 48, figs. 42.

Enumerates, describes, and illustrates forty-four varieties of chickens, and recites their respective points of superiority and general utility.

No. 52, second revision.—The Sugar Beet. Pp. 48, figs. 24.

CONTENTS: Climatic conditions affecting the growth of the sugar beet—The theoretical sugar-beet belt of the United States—Growth of beets on irrigated lands—Varieties of beets—Soils—Fertilization—Precautions to be observed in applying stable manure—Preparation of the land for planting—Planting—Cultivation—Cost of growing beets—Harvesting—Siloing—Domestic production of beet seed—Comparative value of domestic and foreign-grown seed—Manufacture of sugar—Home consumption of sugar—Waste products—Cost of manufacture—Cost of factory—Cooperative factories—Statistical information.

No. 53.—How to Grow Mushrooms. Pp. 20, figs. 14.

CONTENTS: Raising mushrooms from spores—Spawn—Where to grow mushrooms—Manure—Temperature—Gathering the mushrooms—Packing—Marketing—Mushroom diseases—Growing mushrooms in summer.

No. 54, second revision.—Some Common Birds in Their Relation to Agriculture. Pp. 48, figs. 22.

CONTENTS: The cuckoos—The woodpeckers—The kingbird—The phoebe—The bluejay—The crow—The bobolink, or rice bird—The red-winged blackbird—The meadow lark, or old field lark—The Baltimore oriole—The crow blackbird—The sparrows—The rose-crested grosbeak—The swallows—The cedarbird—The catbird—The brown thrasher—The house wren—The robin—The bluebird.

No. 55, revised.—The Dairy Herd: Its Formation and Management. Pp. 31.

CONTENTS: Cattle for the dairy—Pure-bred dairy cattle and grades—The bull and his treatment—Accommodations for the herd—Health of the herd—Fall-fresh cows most profitable—Drying off cows and calving time—Abortion and milk fever—Care of calves and young stock—The pasture season and soiling—The stabling season—Feeding the herd.

No. 56.—Experiment Station Work—I. Pp. 31, figs. 10.

CONTENTS: Good vs. poor cows—Corn vs. wheat—Effects of rations richer and poorer in protein—Forage crops for pigs—Robertson silage mixture—Alfalfa—Effect of fertilizers on the proportion of grain to straw and stover—Comparative fertilizing value of the different phosphates—The harmful effects on soils of the continued use of muriate of potash—Recent progress in the study of irrigation—Potato scab—Barnyard manure—Explanation of terms.

No. 57, revised.—Butter Making on the Farm. Pp. 20.

CONTENTS: Good milk—Creaming the milk—Deep cold-setting—The farm separator—Ripening cream—The churn—Churning—White specks in butter—Coloring butter—Salting and working butter—Make butter to suit the customer.

No. 58, revised.—The Soy Bean as a Forage Crop. With an Appendix on Soy Beans as Food for Man. Pp. 24, figs. 5.

CONTENTS: General characteristics and origin—Varieties—Methods of culture—Harvesting—Yield—Chemical composition—Digestibility—Value and uses—Appendix: Soy beans as food for man.

No. 59.—Bee Keeping. Pp. 32, figs. 19.

CONTENTS: Locations suited to the keeping of bees—The returns to be expected from an apiary—Anyone who desires to do so can learn to manipulate bees—How to avoid stings—What hive to adopt—Management in swarming—Special crops for honey alone not profitable—How to obtain surplus honey and wax—The wintering of bees—The risk of loss through disease and enemies.

No. 60, second revision.—Methods of Curing Tobacco. Pp. 16.

CONTENTS: Curing the Northern cigar tobacco—Curing tobacco in Florida—Curing White Burley tobacco—Curing bright yellow tobacco—Curing export tobacco—Marketing tobacco—Types of tobacco.

No. 61.—Asparagus Culture. Pp. 40, figs. 17.

CONTENTS: History—Botany and varieties—Production of plants from seed—Selection and preparation of soils—Planting and cultivation—Manuring beds—Cost of an asparagus bed—Harvesting and marketing—Canning—Drying—Fungous diseases—Insect enemies.

No. 62.—Marketing Farm Produce. Pp. 28, figs. 7.

CONTENTS: The trade in farm produce—General rules—Packing—The commission merchant—Particular directions: Butter, eggs, poultry and game, meats, potatoes, small fruits, vegetables, and honey.

No. 63.—Care of Milk on the Farm. Pp. 40, figs. 9.

CONTENTS: Dairy bacteria—How milk becomes impure—How to keep milk pure—Fifty dairy rules.

No. 64.—Ducks and Geese: Standard Breeds and Management. Pp. 48, figs. 37.

CONTENTS: Standard breeds of ducks—Management of ducks—Standard breeds of geese—Management of geese.

No. 65.—Experiment Station Work—II. Pp. 32, figs. 7.

CONTENTS: Common crops for forage—Stock melons—Starch in tomatoes—Crimson clover—Geese for profit—Cross pollination—A germ fertilizer—Lime as a fertilizer—Are ashes economical?—Mixing fertilizers.

No. 66, revised.—Meadows and Pastures: Formation and Cultivation in the Middle Eastern States. Pp. 28, figs. 9.

CONTENTS: General prevalence and commercial value of grasses—Grasses as soil builders—Fertilizers for grass lands—Methods of preparing the soil—Sowing the seed—Varieties of grasses and clovers—Some grass mixtures.

No. 68.—The Black Rot of the Cabbage. Pp. 22, fig. 1.

CONTENTS: Nature and prevalence of the disease—Sources of infection—Suggestions for prevention—Prompt marketing—Storage—No danger from eating affected cabbages—Synopsis of rules for prevention.

No. 69.—Experiment Station Work—III. Pp. 32, figs. 2.

CONTENTS: Flax culture—Crimson clover—Forcing lettuce—Heating greenhouses—Corn smut—Millet disease of horses—Tuberculosis—Pasteurized cream—Kitchen and table wastes—Use of fertilizers.

No. 70.—The Principal Insect Enemies of the Grape. Pp. 23, figs. 12.

CONTENTS: The grapevine phylloxera—The grapevine fidia—The grape cane-borer—The grapevine flea beetle—The rose-chailer—The grape leaf-folder—Hawk moths and cutworms—The grape leaf-hopper—The grape berry moth.

No. 71.—Some Essentials in Beef Production. Pp. 24, figs. 17.

CONTENTS: The beef type—The use of the score card—Beef characteristics briefly defined—Selection of store or stock cattle for feeding—Breeding type vs. the block—Excellence for the block due to inherited quality rather than feed or grain—The types compared—Early maturity—The passing of the heavy-weight carcass—The economy of gain at different ages compared.

No. 72.—Cattle Ranges of the Southwest: A History of the Exhaustion of the Pasturage and Suggestions for its Restoration. Pp. 32, figs. 9.

CONTENTS: Early use and present condition of Texas pastures—Obstacles to renewal or improvement of the ranges—How the stock ranges may be renewed.

No. 73.—Experiment Station Work—IV. Pp. 32, figs. 3.

CONTENTS: Pure water—Loss of soil fertility—Availability of fertilizers—Seed selection—Jerusalem artichokes—Kafir corn—Thinning fruit—Use of low-grade apple—Cooking vegetables—Condimental feeding stuffs—Steer and heifer leaf—Swellts in canned beef.

No. 74.—Milk as Food. Pp. 39, charts 2.

CONTENTS: Food and its functions—Composition, characteristics, properties, variations, nutritive value, and digestibility of milk—Skim milk—Cream—Butter—Nutritive value of milk as compared with other foods—Use of milk with other foods—Nutritive value of milk and its cost—Daily menus containing milk.

No. 75.—The Grain Smuts: How They are Caused and How to Prevent Them. Pp. 20, figs. 8.

CONTENTS: Kinds of smut—Directions for treating seed for smut—Directions for drying treated seed—Extra increase in yield as a result of seed treatment—Duty of seedsmen.

No. 76.—Tomato Growing. Pp. 30.

CONTENTS: For the early market—Medium early and late crops—Tomatoes for canneries—Tomatoes in the greenhouse—Insect pests and remedies—Fungous enemies of the tomato.

No. 77, revised.—The Liming of Soils. Pp. 19.

CONTENTS: The use of lime for improving soils—Direct manurial action and chemical action of lime on soils—Physical effect of liming—The effect of lime on the action of microscopic organisms in the soil—Liming sometimes injurious—Plants benefited and plants injured by liming—Influence of lime upon some plant diseases—How often should liming be practiced?—When and how to apply lime—Forms of lime used for agricultural purposes.

No. 78.—Experiment Station Work—V. Pp. 32, figs. 2.

CONTENTS: Humus in soils—Swamp, marsh, or muck soils—Rape—Velvet bean—Sunflowers—Winter protection of peach trees—Subwatering in greenhouses—Bacterial diseases of plants—Grape juice and sweet cider.

No. 79.—Experiment Station Work—VI. Pp. 28, figs. 2.

CONTENTS: Fraud in fertilizers—Sugar-beet industry—Seeding grass land—Grafting apple trees—Forest fires—American clover seed—Mushrooms as food—Pigs in stubble fields—Ensiling potatoes—Anthrax.

No. 80.—The Peach Twig-Borer: An Important Enemy of Stone Fruits. Pp. 16, figs. 5.

CONTENTS: Recent studies of the insect—History and distribution—Life history and habits—The strawberry crown-miner a distinct insect—Natural parasites—Remedies and preventives.

No. 81.—Corn Culture in the South. Pp. 24.

CONTENTS: The soil and its preparation—Rotation—Fertilizers—Varieties—Planting—Cultivation—Harvesting and storing the crop—Saving seed.

No. 82.—The Culture of Tobacco. Pp. 24.

CONTENTS: Selecting the seed—The seed bed and how prepared in the different tobacco districts—Sowing the seed—Time of sowing the seed—Planting—Cultivation—Fertilizers—Topping—Cutting—Saving seed—Insect pests.

No. 83.—Tobacco Soils. Pp. 23, fig. 1.

CONTENTS: Climate and distribution of tobacco—Soils of the several districts—Water content of tobacco soils.

No. 84.—Experiment Station Work—VII. Pp. 32, figs. 8.

CONTENTS: Home-mixed fertilizers—Forcing asparagus in the field—Field selection of seed—Potatoes as food—Corn stover as a feeding stuff—Feeding value of sugar beets—Salt marsh hay—Forage crops for pigs—Ground grain vs. whole grain for chicks—Skim milk for young chickens—By-products of the dairy—Stripper butter—Curd tests in cheese making—Gape disease of chickens.

No. 85.—Fish as Food. Pp. 30.

CONTENTS: Preparing fish for market—Nutritive value of fish—Place of fish in the diet—Preparing fish for the table—Daily menus containing fish—Possible dangers from eating fish.

No. 86.—Thirty Poisonous Plants of the United States. Pp. 32, figs. 24.

CONTENTS: Names, descriptions, and poisonous character of the most important poisonous plants; locality where found; symptoms of poisoning.

No. 87.—Experiment Station Work—VIII. Pp. 32, figs. 6.

CONTENTS: Soil moisture—Fertility of soil—Cover crops for orchards—Cultivating vs. cropping orchards—Transplanting trees—Fecundity of swine—Food value of eggs—Starch from sweet potatoes—The toad as a friend of the farmer.

No. 88.—Alkali Lands. Pp. 23, fig. 1.

CONTENTS: Conditions in the Yellowstone Valley—Rainfall and seepage—How salt determinations are made—Kinds of soil in the valley—Effects of underdrainage.

No. 89.—Cowpeas. Pp. 16, fig. 1.

CONTENTS: Varieties—Soil renovation—cultivation and harvesting—Cowpeas for forage and for silage—Harvesting the seed—Feeding value.

No. 91.—Potato Diseases and Their Treatment. Pp. 12, figs. 4.

CONTENTS: Potato leaf blight or early blight—Potato blight, late blight, or rot—Brown rot—Potato scab—Tip burn, leaf burn, or scald—Arsenical poisoning of potato leaves.

No. 92.—Experiment Station Work—IX. Pp. 30.

CONTENTS: Sugar beets on alkali soils—Planting and replanting corn—Improvement of sorghum by selection—Improved culture of potatoes—Second-crop potatoes for seed—Cold vs. warm water for plants—Soils and fertilizers for forcing head lettuce—The date palm in the United States—Recent studies on the codling moth—Jerusalem artichokes for pigs—Supplements to skim milk in fattening calves—Pasteurization of milk for butter making—Gassy and tainted curds—Pure cultures of bacteria for cheese making—Explanation of terms used in discussing fertilizers, foods, feeding stuffs, etc.

No. 93.—Sugar as Food. Pp. 27.

CONTENTS: Extent of use—Chemical composition—Characteristics of cane sugar and of other kinds—The sugar cane—The sugar beet—The sugar maple—Quality of sugar from different sources—Food value of sugar—Digestion of sugar—Sugar as a flavor—Food value of molasses—Practical use of sugar in dietaries of adults—Bad effects ascribed to sugar—Effect of exercise on the amount of sugar which may be eaten—Sugar in cooked foods—Confectionery—Sugar in the dietaries of children.

No. 94.—The Vegetable Garden. Pp. 24, figs. 8.

CONTENTS: Location—Drainage—Preparation of soil—Supply of seeds and young plants—Planting—Cultivation—Insecticides—Directions for several vegetables.

No. 95.—Good Roads for Farmers. Pp. 47, figs. 49.

CONTENTS: Location, grading, and drainage of roads—Kinds of roads—Road materials—How to build roads—Road-building machinery—Cost of roads.

No. 96.—Raising Sheep for Mutton. Pp. 48, figs. 18.

CONTENTS: Experiments in producing mutton—Principal mutton breeds compared—Lambs preferred in the markets—Method of cutting mutton—Dipping for scab—What constitutes a good sheep—Estimates of a good fleece—General notes on sheep feeding.

No. 97.—Experiment Station Work—X. Pp. 32, figs. 5.

CONTENTS: Manure from cows—Plants for alkali soils—Influence of alkali on plants—Feeding value of the corn plant—Sows and pigs at farrowing time—The soy bean as a feeding stuff—Alfalfa hay for hogs—Animal matter for poultry—Water and animal diseases—Construction and cooling of cheese-curing rooms—Irrigation investigations.

No. 98.—Suggestions to Southern Farmers. Pp. 48.

Summaries of addresses delivered at an Interstate Farmers' Convention held at Vicksburg, Miss., February 8–10, 1899. They relate to soils, the peculiar advantages of the South for growing forage crops, raising and feeding live stock, cotton seed and its products, and other agricultural matters.

No. 99.—Three Insect Enemies of Shade Trees. Pp. 30, figs. 11.

CONTENTS: The imported elm-leaf beetle—The white-marked tussock moth—The fall webworm—Food plants—Remedies—Relative immunity from insect attack of different varieties of shade trees.

No. 100.—Hog Raising in the South. Pp. 40.

CONTENTS: Suitable location—Water—Building—Breeds and breeding—Feeds and feeding—Diseases and treatment—Experiences of successful hog raisers.

No. 101.—Millets. Pp. 28, figs. 6.

CONTENTS: Foxtail millets—Barnyard millets—Broomcorn millets—Culture of millets—Uses and feeding value—Fertilizing value.

No. 102.—Southern Forage Plants. Pp. 48, figs. 14.

CONTENTS: Formation and care of pastures—Soiling and fodder crops—The more important hay and pasture plants: Grasses; leguminous forage plants; miscellaneous forage plants.

No. 103.—Experiment Station Work—XI. Pp. 32, figs. 5.

CONTENTS: Excessive irrigation—Cross pollination of plums—Root pruning of fruit trees—The oxeye daisy—Poisoning by wild cherry leaves—Preserving eggs—Gestation in cows—The long clam—Silage for horses and hogs—Commercial butter culture with pasteurized cream—The stave silo.

No. 104.—Notes on frost. Pp. 24.

CONTENTS: How frost is formed—Seasons of frost—When to expect frost—Protection from frost, devices, etc.—General observations.

No. 105.—Experiment Station Work—XII. Pp. 32, figs. 4.

CONTENTS: Seaweed—The tillering of grain—Fertilizers for garden crops—Sweet corn and pole beans under glass—Girdling grapevines—Cereal breakfast foods—Food value of stone fruits—When to cut alfalfa—Spontaneous combustion of hay—Preservation of milk by pressure—Cream raising by dilution.

No. 106.—Breeds of Dairy Cattle. Pp. 48, figs. 21.

Gives names, numbers, history, descriptions, and illustrations of all the principal breeds of dairy cattle in the United States.

No. 107.—Experiment Station Work—XIII. Pp. 32, figs. 3.

CONTENTS: Fertilizer requirements of crops—Persimmons—Forcing rhubarb—Grinding corn for cows—Waste in feeding corn stalks—Molasses for farm animals—Feeding ducks—Cost of raising calves—Feeding calves with milk of tuberculous cows—Killing the germs of tuberculosis in milk—Ropy milk and cream—Dairy salt.

No. 108.—Saltbushes. Pp. 20, figs. 9.

CONTENTS: General characteristics—Distribution of seed—Introduced saltbushes—American saltbushes—Composition and food value—Miscellaneous alkali plants—Alkali and alkali soils.

No. 109.—Farmers' Reading Courses. Pp. 20.

CONTENTS: Origin and purpose—Development in Pennsylvania, Michigan, New Hampshire, Connecticut, New York, West Virginia, and South Dakota—Publications on agriculture used or recommended in farmers' reading courses.

No. 110.—Rice Culture in the United States. Pp. 28.

CONTENTS: Varieties of rice—Production and importation—Rice lands—Rice soils—Irrigation—Methods of culture—Harvesting—Milling—Rice as a food—By-products—Rice culture in southwestern Louisiana and southeastern Texas.

No. 111.—The Farmer's Interest in Good Seed. Pp. 24, figs. 7.

CONTENTS: Relation between quality of seed and amount to sow per acre—Weed seeds sown on the farm—Low-priced seed may be expensive—Results of some tests—How to secure good seed.

No. 112.—Bread and the Principles of Bread Making. Pp. 39, figs. 3.

CONTENTS: Grains and flours—Yeast and other leavening agencies—Raised bread—Special breads—Household methods of bread making—Imperfections and impurities in bread—Nutritive value and cost of bread.

No. 113.—The Apple and How to Grow It. Pp. 32, figs. 10.

CONTENTS: Uses of the apple—Propagation: Budding, grafting, etc.—Locating an orchard—Drainage and fertilizing—Planting—Selection of trees—Lists of varieties suited to large areas.

No. 114.—Experiment Station Work—XIV. Pp. 28, figs. 5.

CONTENTS: Influence of salt and similar substances on soil moisture—Extra early potatoes—Rotting of cranberries—Chestnuts—Low-grade Paris green—Crude petroleum as insecticide—Skim milk in bread making—Best number of hens in one pen—Nest box for egg records—Profitable and unprofitable cows.

No. 115.—Hop Culture in California. Pp. 28, figs. 2.

CONTENTS: Varieties of hops—Where grown and yield per acre—Methods of culture—Systems of training—Harvesting and curing—Baling and marketing—Prices and wages—Hop statistics.

No. 116.—Irrigation in Fruit Growing. Pp. 48, figs. 8.

CONTENTS: Irrigation and cultivation—Effects of insufficient moisture—Development and utilization of irrigation water—Preparing the land—Methods of applying the water.

No. 118.—Grape Growing in the South. Pp. 32, figs. 6.

CONTENTS: Propagation—Selection of varieties—Planting, cultivation, and fertilizing—Pruning—Trellises and systems of training—Insect enemies and fungous diseases.

No. 119.—Experiment Station Work—XV. Pp. 31, figs. 5.

CONTENTS: Storing apples without ice—Cold storage on the farm—Mechanical cold storage for fruit—Keeping qualities of apples—Improvement of blue-berries—Transplanting muskmelons—Banana flour—Fresh and canned tomatoes—Purslane—Mutton sheep—Effect of cotton-seed meal on the quality of butter—Grain feed of milk cows—Protection against Texas fever.

No. 120.—The Principal Insects Affecting the Tobacco Plant. Pp. 32, figs. 25.

CONTENTS: The tobacco flea-beetle—The tobacco horn worms—The bud worms—The “suck fly” and other sucking bugs—The tobacco leaf-miner—Cut-worms—The cigarette beetle—Other insects—Remedies.

No. 121, revised.—Beans, Peas, and Other Legumes as Food. Pp. 32, figs. 10.

CONTENTS: Geographical distribution—The bean—The pea—The lentil—The peanut—Nutritive value of legumes—Digestibility—Extent of use in dietaries—Preparation of legumes for food—Comparative value of legumes in relation to their cost.

No. 122.—Experiment Station Work—XVI. Pp. 32, figs. 5.

CONTENTS: Liming grass lands—Early plowing for fall wheat—Grafting grape cuttings—Olives—Nuts as food—Coffee substitutes—The working of a pure-food law—Feeding moldy corn—Selling eggs by weight—Flavor of eggs—Unfermented grape juice.

No. 123.—Red Clover Seed: Information for Purchasers. Pp. 11, figs. 2.

CONTENTS: Selection of seed—European as compared with American seed—Determination of quality—Adulterants—Germination—Testing—Cuttings and yield.

No. 124.—Experiment Station Work—XVII. Pp. 32, figs. 6.

CONTENTS: Distilled drinking water—Soil inoculation—Treatment of sandy soils—Lime as a fertilizer—Fertilizers for market-garden crops—Pecan culture—Weed destruction—Maple sirup and sugar—Value of cotton seed—Alfalfa silage—Forage crops for pigs—Grazing steers—Type of the dairy cow.

No. 125.—Protection of Food Products from Injurious Temperatures. Pp. 26.

CONTENTS: Shipment of perishable products—Cars, appliances, and methods—Fresh meats—Dairy products and eggs—Fish and oysters—Fruits and vegetables—Storage of apples, potatoes, other vegetables, and tropical fruits—Temperatures favorable to slaughtering animals and preserving meats—Use of weather reports—Temperature tables.

No. 126.—Practical Suggestions for Farm Buildings. Pp. 48, figs. 28.

CONTENTS: Location of the buildings—Plan of the house—Two plans for farm residences—The foundation—The cellar—The frame—The floors—The roof—The sheathing—The windows—The veranda—Painting—Interior finish—Barns and out-buildings—Silos—Sanitary arrangements.

No. 127, revised.—Important Insecticides: Directions for Their Preparation and Use. Pp. 42, figs. 6.

CONTENTS: Relation of food habits to remedies—Insecticides for external biting insects (food poisons)—The arsenicals: Paris green, Schleele's green, arsenate of lead, and London purple—How to apply them—Insecticides for external sucking insects

(contact poisons): Soaps, sulphur, pyrethrum, pure kerosene, crude petroleum, kerosene emulsions—The resin wash—The gas treatment—Dusting and spraying apparatus—Remedies for subterranean insects—Remedies for insects affecting stored grain and other products—Profit in remedial measures.

No. 128, revised—Eggs and Their Uses as Food. Pp. 32.

CONTENTS: Uses of eggs—Description, composition, flavor, and digestibility of eggs—Place of eggs in the diet—Marketing and preserving eggs—Possible dangers from eating eggs—The egg industry.

No. 129.—Sweet Potatoes. Pp. 40.

CONTENTS: Varieties—Soils and fertilization—Propagation of plants—Preparation of land—Planting—Cultivation—Harvesting—Shipping—Markets and prices—Storage—How to cook sweet potatoes—Exportation of sweet potatoes—Diseases and insect enemies—Sweet potatoes for stock feeding.

No. 131.—Household Tests for the Detection of Oleomargarine and Renovated Butter. Pp. 11.

CONTENTS: Renovated or process butter—How it is made—How to distinguish genuine butter from renovated, and both from oleomargarine—Household tests: The boiling test and the Waterhouse test.

No. 132.—The Principal Insect Enemies of Growing Wheat. Pp. 40. figs. 25.

CONTENTS: The chinch bug; preventives and remedies—The Hessian fly; preventive and remedial measures—The wheat midge; preventives—The wheat plant-louse—The wheat straw-worms—The army worms—The wheat sawflies.

No. 133.—Experiment Station Work—XVIII. Pp. 32, figs. 14.

CONTENTS: Value of stable manure—Alfalfa as a fertilizer—Liming acid soils—Celery culture—The greenhouse in summer—Frost-resisting strawberries—Fumigator for fruit trees—Foundation in comb building—Ridding houses of flies—Slop for pigs—Profitable crops for pigs—Barley for horses—Water in butter—Losses in the silo.

No. 134.—Tree Planting on Rural School Grounds. Pp. 38, figs. 17.

CONTENTS: Reasons for school-ground planting—Arbor Day and its celebration—What planting to do—Kinds of trees to plant—Obtaining the trees—How to plant trees—Why trees die in transplanting—Care of trees after planting—Studies for the teacher and school.

No. 135.—Sorghum Sirup Manufacture. Pp. 40, figs. 26.

CONTENTS: Soil and climate as affecting quality of sirup—Varieties of sorghum suited to different localities—Planting, cultivating, and harvesting—Grinding cane—Classification of juice—Claying—Liming—Filtering—Skimming—Evaporation—Settling—Decanting devices—Condensed statements of sorghum-sirup makers.

No. 136.—Earth Roads. Pp. 24, figs. 20.

CONTENTS: Location—Drainage—Maintenance and repairs.

No. 137.—The Angora Goat. Pp. 48, figs. 7.

CONTENTS: Description—Uses—Browsing and pasturage—Mohair and its manufactures—Meat and markets—The milk—The skins—Localities adapted to Angora raising—The care of Angora goats—Building up and management of a flock—Shearing and shedding—Diseases—Tariff—Registration associations.

No. 138.—Irrigation in Field and Garden. Pp. 40, figs. 18.

CONTENTS: Determining levels—Measurement of small streams—Sources of water supply and their use—Distribution of irrigation water—Methods of applying water—When should water be applied?

No. 139.—Emmer: A Grain for Semiarid Regions. Pp. 16, figs. 3.

CONTENTS: Use of incorrect names—Characteristics—History and distribution—Adaptation for cultivation in this country—Tests—Uses—Varieties—Use in wheat breeding—Cultivation.

No. 140.—Pineapple Growing. Pp. 48, figs. 4.

CONTENTS: The pineapple family—Varieties—Climate—Soil—Gathering—Shipping—Cold storage—Markets—Prices—Starting without capital—Fertilizers—Mulching—Laying off the land—Planting—Cultivation—Irrigation—Canning—Diseases, insects, and injuries—Pineapple sheds—By-products.

No. 141.—Poultry Raising on the Farm. Pp. 16, figs. 31.

CONTENTS: The kind of fowls to keep—Improvement of breeds—Care of fowls—Popular varieties—Poultry houses—Coops—Feed troughs and drinking fountains—Ranging of fowls—Colonies—Poultry in combination with specialties in farming.

No. 142.—The Nutritive and Economic Value of Food. Pp. 48, charts 2.

CONTENTS: Chemical composition of the body and food—Food as building material and fuel—How the functions and nutritive value of food are learned—Food as a source of energy—Composition of common food materials—Digestion, assimilation, and excretion—Preparation of food—Dietaries and dietary standards—Adapting food to the needs of the body—Advantages of several meals a day—Pecuniary economy of food—Errors in our food economy.

No. 143.—Conformation of Beef and Dairy Cattle. Pp. 44, figs. 44.

CONTENTS: Meaning and importance of conformation—Stock judging—A study of the details of conformation—Some typical animals, good, bad, and indifferent—Grading up common stock by crossing.

No. 144.—Experiment Station Work—XIX. Pp. 32, figs. 9.

CONTENTS: Maintenance of soil fertility—Thomas slag—Rotation of crops—Gardening under glass—Winter irrigation of orchards—Improvement of American grapes—Condimental and medicinal cattle and poultry foods—Feeding rice meal to pigs—Dressing and packing poultry—The curing of cheese—An improved cow stall.

No. 145.—Carbon Bisulphid as an Insecticide. Pp. 28.

CONTENTS: Properties of carbon bisulphid—Effects of inhaling vapor—Character as an insecticide—Uses in combating various insects—Incidental effects of treatment—Appendix: Chemical experiments with carbon bisulphid.

No. 146.—Insecticides and Fungicides: Chemical Composition and Effectiveness of Certain Preparations. Pp. 16.

The principal insecticides and fungicides on the market are briefly treated.

No. 147.—Winter Forage Crops for the South. Pp. 36, figs. 24.

CONTENTS: Forage resources—Grasses—Cereals—Alfalfa—The clovers—Vetches—Rape.

No. 148.—Celery Culture. Pp. 32, figs. 7.

CONTENTS: The soil and its preparation—Sowing the seed—Transplanting—Watering—Mulching—Cultivation—Fungous diseases and insect enemies—Blanching—Storing for winter—Profits—Varieties.

No. 149.—Experiment Station Work—XX. Pp. 32, figs. 6.

CONTENTS: Muck or peat—Culture of potatoes—The farmer's vegetable garden—Shrinkage of farm products—Muskmelons—Soils and fertilizers for strawberries—Plum culture—Onion culture—Digestibility of milk—Shelter for dairy cows—Feed mills and wind mills.

No. 150.—Clearing New Land. Pp. 24, figs. 7.

CONTENTS: What land should be cleared—Cost of clearing—Methods of clearing—Pasturing—Cutting away timber—Use of dynamite—Use of machinery—Use of horses and oxen—Root systems of trees—Cultivation of new land—Crops adapted to new land.

No. 151.—Dairying in the South. Pp. 48, figs. 4.

CONTENTS: Natural advantages of the South—Buildings—Water supply—Breeds of cows—Feeds and feeding—Utensils—Handling the milk—Selling milk—Butter making.

No. 152, revised.—Scabies in Cattle. Pp. 24, figs. 15.

CONTENTS: Cause of scabies or mange—Transmissibility of mange—Disinfection—Treatment—Dipping plants—Specifications for large dipping plant with swimming tank—Dipping in oil—Mange in horses.

No. 153.—Orchard Enemies in the Pacific Northwest. Pp. 39, fig. 1.

CONTENTS: Conditions affecting orchards in the coast region, in the inland valleys, and in the inland uplands—Legislation—Insecticides and their preparation—Fungicides and how to prepare them—Quack insecticides and fungicides—Insect pests—Bacterial and fungous diseases.

No. 154.—The Home Fruit Garden: Preparation and Care. Pp. 20, figs. 6.

CONTENTS: General considerations—Soil—Planting—Pruning—Protection—Dwarfing—Grafting—Combining fruit and vegetables—Varieties of fruits for home gardens.

No. 155.—How Insects Affect Health in Rural Districts. Pp. 20, figs. 16.

CONTENTS: Conditions in city and country—Sources of typhoid fever—Malaria—Protection from and prevention of typhoid and malaria—Mosquitoes and flies as bearers of disease—Yellow fever and other diseases.

No. 156.—The Home Vineyard, with Special Reference to Northern Conditions. Pp. 24, figs. 15.

CONTENTS: Location—Soil, drainage, and fertilizers—Propagation of the vine—Planting—Supports and training—Pruning—Varieties—Sacking grapes—Insect enemies and remedies—Fungous diseases and treatment—Preparation of spraying mixtures—Applying fungicides.

No. 157.—The Propagation of Plants. Pp. 24, figs. 22.

CONTENTS: Means by which plants are reproduced—Propagation by means of seeds, cuttings, layering, grafting, and budding.

No. 158.—How to Build Small Irrigation Ditches. Pp. 28, figs. 9.

CONTENTS: Methods of running grade lines—Selection of site for head gate and choice of ditch line—Laying out field laterals—Methods of applying water—When to irrigate—Cost of building and maintaining a ditch.

No. 159.—Scab in Sheep. Pp. 48, figs. 17.

CONTENTS: Cause and description of common sheep scab—Conditions which may be mistaken for scab—Treatment—Dipping, and kinds of dips—Dipping plants—Federal laws and regulations relative to sheep scab.

No. 161.—Practical Suggestions for Fruit Growers. Pp. 28, figs. 8.

CONTENTS: The location of the orchard—Varieties—Pruning—Fertilizing—Cover crops—Tillage—Marketing the product—Sprays and spraying—Spraying apparatus—Aid to be derived from U. S. Department of Agriculture and State Experiment Stations.

No. 162.—Experiment Station Work—XXI. Pp. 32, figs. 3.

CONTENTS: Value of barnyard manure—Nitrate of soda for market-garden crops—Cooking meat—Sugar-beet products—Feeding horses—Plant poisonous to horses—Fattening beef cattle—Profit from dairy cows—Shearing as affecting gains made by lambs—Soft pork and bacon—Purifying milk—Cheese prints—Draft of farm wagons—The disk plow.

No. 164.—Rape as a Forage Crop. Pp. 16, fig. 1.

CONTENTS: Description and varieties of rape—Soil requirements—Seeding and cultivation—Harvesting—Feeding value—Danger from bloating—Rape as a catch crop, a cover crop, and a weed destroyer—Notes on growing rape in several States.

No. 165.—Silkworm Culture. Pp. 32, figs. 15.

CONTENTS: The life of the silkworm—The food of the silkworm—Implements needed—Silkworm eggs—Rearing silkworms—Preparations for spinning—Preparing cocoons for market—Diseases of silkworms.

No. 166.—Cheese Making on the Farm. Pp. 16, figs. 3.

CONTENTS: How to make dairy-farm cheese—How to make small cheese—Print cheese—Pot cheese—Neufchâtel cheese—Cream cheese—Notes for home cheese making.

No. 167.—Cassava. Pp. 32, figs. 11.

CONTENTS: Varieties, bitter and sweet—Historical review—Region for growing limited by frost—Soil and moisture requirements—Fertilizers—Planting and cultivation—Diseases—Harvesting—Yield and profit—Cassava as a stock feed—Cassava for starch.

No. 168.—Pearl Millet. Pp. 16, figs. 3.

CONTENTS: Description—Common names—Origin and history—Pencilaria or Mand's Wonder Forage Plant—Culture of pearl millet—Yield—Feeding value—Pearl millet for soiling, for silage, and for hay.

No. 169.—Experiment Station Work—XXII. Pp. 32, figs. 6.

CONTENTS: Pure water for cows—When to cut forage crops—Lippia, or fog fruit—Pithiness in celery—Irrigation of strawberries—Farmers' fruit garden—Management of orchards—Tropical and subtropical fruits—China asters—Preserving sweet potatoes—Food value of beans—Tankage for pigs—Remedies for fleas.

No. 170.—Principles of Horse Feeding. Pp. 44.

CONTENTS: Principles of nutrition—Composition and comparative value of various feeding stuffs—Methods of feeding—Fattening horses for market—Watering horses—Digestibility of feeds—Rations and feeding standards—Muscular work and its effect on feed requirements.

No. 171.—The Control of the Codling Moth. Pp. 24, figs. 4.

CONTENTS: Distribution of codling moth—Fruits infested—Life history—Natural enemies—Preventive measures—Remedial measures—Spraying—Banding.

No. 172.—Scale Insects and Mites on Citrus Trees. Pp. 43, figs. 34.

CONTENTS: Influence of cultivation, pruning, and climate—Nature of injury done—Natural enemies—The gas treatment—Sprays and spraying—The armored scales—The unarmored scales—The white fly—The rust mite or silver mite—The six-spotted mite.

No. 173.—A Primer of Forestry. Pp. 48, figs. 33.

CONTENTS: The life of the tree—Trees in the forest—The life of the forest—Enemies of the forest—Grazing in the forest—Destructive lumbering—Insects and fungi—Wind and snow in the forest—Forest fires and means of defense.

No. 174.—Broom Corn. Pp. 32, figs. 10.

CONTENTS: Description of the plant—Local factors influencing production—Importance of good seed—Planting—Cultivation—Harvesting—Drying—Baling—Marketing—Profits—Diseases—Statistics.

No. 175.—Home Manufacture and Use of Unfermented Grape Juice. Pp. 16, figs. 8.

CONTENTS: Composition of the grape—Causes of fermentation—Preventing fermentation—Home manufacture—Useful appliances—Composition of unfermented grape juice—Flavor and quality—Uses and food value—A few good recipes.

No. 176.—Cranberry Culture. Pp. 20, figs. 12.

CONTENTS: Species and description—Conditions essential to success—Propagation and planting—Cultivation—Flooding—Harvesting, storing, and marketing—Varieties.

No. 177, revised.—Squab Raising. Pp. 32, figs. 11.

CONTENTS: Buildings—Varieties of pigeons—Breeding—Feeds and feeding—Management—Killing, dressing, and marketing—Diseases, parasites, and remedies.

No. 178.—Insects Injurious in Cranberry Culture. Pp. 32, figs. 12.

CONTENTS: Insects that attack the foliage—Insects that attack the stem—Insects that attack the fruit—The ideal cranberry bog.

No. 179.—Horseshoeing. Pp. 31, figs. 18.

CONTENTS: Anatomy of the horse's foot—The hoof—Forms of feet—Preparation of hoof for shoeing—Characteristics of the shoe—Shoes for different hoofs—Hot fitting—The bar shoe—The rubber pad—Shoeing to prevent interfering.

No. 180.—Game Laws for 1903. Pp. 56.

A summary of the provisions relating to open and close seasons, shipment and sale of game, and licenses, in State and Federal laws.

No. 181.—Pruning. Pp. 39, figs. 25.

CONTENTS: Growth under natural and artificial conditions—Reasons for pruning—When and how to prune—Pruning implements—How to prune the different species of orchard plants.

No. 182.—Poultry as Food. Pp. 40.

CONTENTS: Varieties of poultry—Feeding—Fattening—Dressing and marketing—Marks of good poultry—Cooking—Potted and canned poultry—Composition, digestibility, and nutritive value of poultry and poultry products—Cost of poultry—Place in the diet.

No. 183.—Meat on the Farm: Butchering, Curing, and Keeping. Pp. 40, figs. 38.

CONTENTS: Selection of animals—Preparation of animals for slaughter—Killing and dressing cattle—Killing and dressing of hogs and sheep—Dressing poultry—Cooling the carcass—Cutting up meat—Keeping fresh meat—Curing meat—Recipes for curing.

No. 184.—Marketing Live Stock. Pp. 41.

CONTENTS: Buying and selling in country districts—Periodical auction sales—Rules and methods in Chicago horse market—Prominent metropolitan markets—Inspection of stock—The abattoir and the packing house—Market classification of live stock—Shipment of stock by railway—The export trade.

No. 185.—Beautifying the Home Grounds. Pp. 24, figs. 8.

CONTENTS: Planting plan—Walks and drives—The greensward—Shrubs—Deciduous trees—Evergreens—Tall grasses—Vines—Cultural suggestions.

No. 186.—Experiment Station Work—XXIII. Pp. 32, figs. 9.

CONTENTS: Losses in manure—Macaroni wheats—Sterilizing greenhouse soils—Tomatoes under glass—Protection of peach buds—Dandelions in lawns—Apple pomace for cows—Rations for laying hens—Early molting hens—Evaporation from incubator eggs—Keeping quality of butter—Curing cheese in cold storage.

No. 187.—Drainage of Farm Lands. Pp. 40, figs. 19.

CONTENTS: Structure of soils—Surface drainage—Underdrainage—Construction of open ditches—Ditching machines—Tiles and their use—Locating the drains—Surveys and grades—Laying the tiles—Cost and profit—Drainage of irrigated lands.

No. 188.—Weeds Used in Medicine. Pp. 47, figs. 31.

CONTENTS: Collection and curing of drugs—Roots, barks, leaves, flowers, and seeds—Disposal of the drugs—Description of plants: Burdock, dandelion, docks, couch grass, pokeweed, foxglove, mullein, lobelia, tansy, gum plant, scaly grindelia, boneset, catnip, hoarhound, blessed thistle, yarrow, Canada fleabane, jimson weed, poison hemlock, American wormseed, black mustard, white mustard.

No. 189.—Information Concerning the Mexican Cotton Boll Weevil. Pp. 31, figs. 8.

CONTENTS: Recommendations—Territory affected—Amount of damage—Plan of investigation by Division of Entomology—Some results of field work—Will the weevil reach other cotton-producing countries?—Description of weevil—Legal restrictions concerning shipment of infested cotton seed—Warning.

No. 190.—Experiment Station Work—XXIV. Pp. 32, figs. 14.

CONTENTS: Cost of eggs in winter—The chicken mite—Soiling crops—Profitable and unprofitable cows—Methods of milking—Coating cheese with paraffine—The octagonal silo—Ventilation of stables—Disposal of diseased carcasses.

No. 191.—The Cotton Bollworm: An Account of the Insect, with results of experiments in 1903. Pp. 24, figs. 7.

CONTENTS: Injury in 1903—Distribution—Food plants—Number of generations—The bollworm on corn—Ineffective remedies: Lights for trapping moths, poisoned sweets, burning sulphur in field, resistant varieties—Field experiments in 1903—Cultural methods—Arsenical poisons—Corn as a trap crop—Recommendations.

No. 192.—Barnyard Manure. Pp. 32, figs. 4.

CONTENTS: Manure as a farm resource—Amount, composition, and value of manure produced by different animals—Value of solid and liquid parts—Influence of age and kind of animal, quality and quantity of food, nature and proportion of litter—Management of manure—Use of manure—Combining manure with fertilizers—Effects of barnyard manure.

No. 193.—Experiment Station Work—XXV. Pp. 32, figs. 9.

CONTENTS: Watermelons in the North—Watermelon culture in Georgia—Musk-melon culture in the North—Rockyford muskmelon—Cold storage of fruits—Selection of seed corn—Bread and toast—Cooking meat—Bitter milk.

No. 194.—Alfalfa Seed. Pp. 14, figs. 8.

CONTENTS: Description of seed—Adulteration—Imported seed—Weed seeds—Home testing—Testing by U. S. Department of Agriculture.

No. 195.—Annual Flowering Plants. Pp. 48, figs. 55.

CONTENTS: Use of plants about a dwelling—School gardens—General cultural suggestions—Hotbeds—Cold frames—Pits—Descriptions and directions for the culture of more than seventy flowering plants.

No. 196.—Usefulness of the Toad. Pp. 16.

CONTENTS: Life history and habits—Food of the toad—The toad's capacity for good—Natural enemies—How the toad may be made useful—Study of the toad.

No. 197.—Importation of Game Birds and Eggs for Propagation. Pp. 30, fig. 1.

CONTENTS: Number, kinds, source, and destination of game birds imported—Importation of eggs—Experiments abroad in introducing game birds—State experiments—Difficulties.

No. 198.—Strawberries. Pp. 28, figs. 15.

CONTENTS: Propagation—Field culture—Soil—Fertilizers—Selecting the plants—Pollination—When and how to set plants—Mulching—Harvesting and shipping—Forcing for winter fruit—Varieties.

No. 199.—Corn Growing. Pp. 31, figs. 22.

CONTENTS: Possibility of doubling present yield—Improvement in seed—Improvement in soil conditions—Soil washing and its prevention—Absorption and retention of rainfall—Fertilizers and crop rotation—Improvements in methods of cultivation—Fall plowing—Depth of plowing—Planting—Importance of thorough early cultivation—Depth and frequency of cultivation—Kinds of cultivation.

No. 200.—Turkeys: Standard Breeds and Management. Pp. 40, figs. 12.

CONTENTS: Origin of the domestic turkey—Present condition of the industry—The standard breeds—Selection and treatment of breeding stock—Egg laying, incubation, and hatching—Growing the poults—Feeding for market—Feeding stock turkeys—Marketing—Insect parasites and diseases.

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- Circular No. 3.—Saltbushes. Pp. 4, figs. 3.
- Circular No. 4.—The Renewing of Worn-out Native Prairie Pastures. Pp. 4, figs. 4.
- Circular No. 6, revised.—The Cultivated Vetches. Pp. 8, figs. 6.
- Circular No. 8.—Experiments in Range Improvement. Pp. 5, fig. 1.
- Circular No. 11.—The Flat Pea. Pp. 6, figs. 3.
- Circular No. 12.—Rape as a Forage Plant. Pp. 6, fig. 1.
- Circular No. 13.—Florida Beggar Weed. Pp. 5, figs. 2.
- Circular No. 14.—The Velvet Bean. Pp. 5, figs. 3.
- Circular No. 17.—Crimson Clover. Pp. 6, fig. 1.
- Circular No. 18.—Smooth Brome Grass. Pp. 9, figs. 2.
- Circular No. 20.—Experiments with Forage Plants in Ontario. Pp. 3.
- Circular No. 21.—Cooperative Range Grass and Forage-Plant Experiments at Highmore, S. Dak. Pp. 10, fig. 1.
- Circular No. 22.—Grass and Forage-Plant Investigations on the Pacific Coast. Pp. 7.
- Circular No. 23.—Progress of Experiments in Forage Crops and Range Improvement at Abilene, Tex. Pp. 20, fig. 1.
- Circular No. 24.—Cowpeas and Corn for Silage and Fodder. Pp. 10, figs. 2.
- Circular No. 25, revised.—Turkestan Alfalfa. Pp. 20.
- Circular No. 26.—Rescue Grass. Pp. 4, fig. 1.
- Circular No. 31.—Bermuda Grass. Pp. 6, figs. 2.
- Circular No. 33.—Range Grass and Forage-Plant Experiments at Highmore, S. Dak. Pp. 5.

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- Circular No. 1.—Directions for Pasteurization of Milk. P. 1, figs. 2.
- Circular No. 3.—Nodular Tæniasis of Fowls. Pp. 3.
- Circular No. 4.—Crossing Improved Breeds of Swine with the Common Hogs of Florida. Pp. 3.
- Circular No. 5.—The Direct Transmission of Infectious Enterohepatitis in Turkeys. Pp. 8.
- This circular discusses the nature of the disease sometimes called blackhead.
- Circular No. 6.—Black Quarter. Pp. 4.
- Circular No. 17.—Exports of Animals and their Products. Pp. 3.

- Circular No. 19.—Factory Cheese and How it is Made. Pp. 8.
- Circular No. 22.—List of Officers and Associations Connected with the Dairy Interests of the United States and Canada for 1898. Pp. 8.
- Circular No. 23, second revision.—Directions for the Use of Blackleg Vaccine. Pp. 8, figs. 3.
- Circular No. 24.—Colored Spots in Cheese. Pp. 6.
- Circular No. 25, revised.—State Standards for Dairy Products. Pp. 2.
- Circular No. 26.—Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for the Year 1899. Pp. 8.
- Circular No. 27, revised.—Scale of Points for Judging Dairy Breeds of Cattle. Pp. 16, fig. 1.
- Circular No. 28.—Letters Relating to the Distribution of Vaccine. Pp. 9.
- Circular No. 29.—Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for the Year 1900. Pp. 10.
- Circular No. 31, revised.—Blackleg: Its Nature, Cause, and Prevention. Pp. 23, fig. 1.
- Circular No. 32.—The Imperial German Meat-Inspection Law. (In English and German.) Pp. 19.
- Circular No. 33.—Officials, Associations, and Educational Institutions Connected with Dairy Interests in the United States for the Year 1901. Pp. 8.
- Circular No. 34.—Notes on Parasites—55-57. Pp. 4.
- Circular No. 35.—Treatment for Roundworms in Sheep, Goats, and Cattle. Pp. 8.
- Circular No. 36.—Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for the Year 1902. Pp. 8.
- Circular No. 37.—Preliminary Report on Argentina as a Market for Pure-bred Cattle from the United States. Pp. 4.
- Circular No. 39.—The Water Content of Creamery Butter. Pp. 4.
- Circular No. 40.—Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for 1903. Pp. 11.
- Circular No. 41.—A Form of Hog Cholera not Caused by the Hog-Cholera Bacillus. Pp. 4.
- Circular No. 42.—Information Concerning Common Goats. Pp. 14.
- Circular No. 43.—Immunization from Hog Cholera. Pp. 3.
- Circular No. 44.—Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for the Year 1904. Pp. 12.
- Circular No. 45.—Milk Fever: Its Simple and Successful Treatment. Pp. 13, figs. 2.

DIVISION OF BIOLOGICAL SURVEY.

- Circular No. 17.—Bird Day in the Schools. Pp. 4.
- Circular No. 28.—Directory of State Officials and Organizations Concerned with the Protection of Birds and Game. Pp. 8.
- Circular No. 29.—Protection and Importation of Birds under Act of Congress approved May 25, 1900. Pp. 6.
- Circular No. 30.—Wild Animals and Birds which May be Imported without Permits. P. 1.
- Circular No. 31.—Information Concerning Game: Seasons, Shipment, and Sale. Pp. 20.
- Circular No. 32, revised.—Directions for the Destruction of Prairie Dogs. Pp. 2.
- Circular No. 34.—Laws for the Protection of Birds and Game in the District of Columbia. Pp. 8.
- Circular No. 36.—Importation of Reptiles into Hawaii. Pp. 2.
- Circular No. 37.—Regulations for the Importation of Eggs of Game Birds for Propagation. Pp. 2.
- Circular No. 38.—Interstate Commerce in Birds and Game. Pp. 3.
- Circular No. 39.—Regulations for the Protection of Game in Alaska. Pp. 6.
- Circular No. 40, revised.—Directory of State Officials and Organizations Concerned with the Protection of Birds and Game, 1903.
- Circular No. 42.—Regulations for the Protection of Game in Alaska for the Year 1904. Pp. 6.

DIVISION OF BOTANY.

- Circular No. 1.—Hungarian Brome Grass. Pp. 4, fig. 1.
- Circular No. 2.—Nut Grass (*Cyperus rotundus*). Pp. 4, fig. 1.
- Circular No. 5.—Giant Knotweed or Sachaline. Pp. 4, figs. 3.
- Circular No. 7.—Tumbling Mustard. Pp. 8, figs. 3.
- Circular No. 9, revised.—Wild Garlic. Pp. 8, figs. 3.
- Circular No. 11.—The Vitality of Seed Treated with Carbon Bisulphid. Pp. 5.
- Circular No. 15.—Horse-Radish. Pp. 8.
- Circular No. 16.—The Section of Seed and Plant Introduction. Pp. 6.
- Circular No. 17.—Notes on the Plant Products of the Philippine Islands. Pp. 8.
- Circular No. 19.—Hop Cultivation in Bohemia. Pp. 6.
- Circular No. 20.—Horse-Radish Culture in Bohemia. Pp. 3, figs. 2.
- Circular No. 21.—Yams in the West Indies. Pp. 4, fig. 1.
- Circular No. 22.—The Bur, or Globe, Artichoke. Pp. 6, fig. 1.
- Circular No. 23.—The Lebbek or Siris Tree. Pp. 4, figs. 2.
- Circular No. 24.—Red Clover Seed. Pp. 5, figs. 2.

- Circular No. 25.—The Seed of Beardless Brome Grass. Pp. 5, fig. 1.
 Circular No. 27, revised.—Canada Thistle. Pp. 14, figs. 4.
 Circular No. 28.—Rubber Cultivation for Porto Rico. Pp. 12.
 Circular No. 29.—Chicory Growing. Pp. 12, figs. 3.
 Circular No. 30, revised.—List of Publications of the Division of Botany. Pp. 10.

BUREAU OF CHEMISTRY.

- Circular No. 1.—The Manufacture of Sorghum Sirup. Pp. 3.
 Circular No. 3, second revision.—Proposed Reforms in Fertilizer-Inspection Laws. Pp. 4.
 Circular No. 5.—Chemical Examination of Canned Meats. Pp. 7.
 Circular No. 6.—Composition Chimique du Maïs et de Ses Produits. Pp. 13.
 Circular No. 9.—A Plan for Cooperating in the Study of Available Plant Food. Pp. 8.
 Circular No. 10.—Methods for the Analysis of Insecticides and Fungicides. Pp. 8.
 Circular No. 12.—Methods for the Investigation of Canceling Inks and Other Stamping Inks. Pp. 8.
 Circular No. 13.—Extracts from the Proceedings of the Association of Official Agricultural Chemists, 1903. Pp. 14.

DIVISION OF ENTOMOLOGY.

- Circular No. 2.—The Hop Plant Louse and the Remedies to be Used Against It. Pp. 7, pl. 1, figs. 5.
 Circular No. 4.—The Army Worm. Pp. 5, figs. 3.
 Circular No. 5.—The Carpet Beetle, or "Buffalo" Moth. Pp. 4, fig. 1.
 Circular No. 7.—The Pear Tree Psylla. Pp. 8, figs. 6.
 Circular No. 8.—The Imported Elm Leaf Beetle. Pp. 4, fig. 1.
 Circular No. 9.—Canker Worms. Pp. 4, figs. 4.
 Circular No. 10.—The Harlequin Cabbage Bug, or Calico Back. Pp. 2, fig. 1.
 Circular No. 11.—The Rose Chafer. Pp. 4, fig. 1.
 Circular No. 12, revised.—The Hessian Fly. Pp. 4, fig. 1.
 Circular No. 13, revised.—Mosquitoes and Fleas. Pp. 6.
 Circular No. 14.—The Mexican Cotton-boll Weevil. Pp. 8, figs. 5.
 Revision of Circular No. 6, printed in Spanish only.
 Circular No. 16.—The Larger Cornstalk Borer. Pp. 3, figs. 3.
 Circular No. 18.—The Mexican Cotton-boll Weevil. Pp. 8, figs. 5.
 Revision of Circular No. 14, printed in two editions—English and Spanish.
 Circular No. 19.—The Clover Mite. Pp. 4, fig. 1.
 Circular No. 20.—The Woolly Aphis of the Apple. Pp. 6, figs. 2.

- Circular No. 21.—The Strawberry Weevil. Pp. 7, figs. 4.
- Circular No. 22.—The Periodical Cicada in 1897. Pp. 4.
- Circular No. 23.—The Buffalo Tree-hopper. Pp. 4, figs. 4.
- Circular No. 24.—The Two-lined Chestnut Borer. Pp. 8, fig. 1.
- Circular No. 25.—The Ox Warble. Pp. 10, figs. 10.
- Circular No. 26.—The Pear Slug. Pp. 7, figs. 4.
- Circular No. 27.—The Mexican Cotton-boll Weevil in 1897. Pp. 7.
- Circular No. 28.—The Boxelder Plant-bug. Pp. 3, fig. 1.
- Circular No. 29, revised.—The Fruit-Tree Bark-beetle. Pp. 8, figs. 4.
- Circular No. 31, revised.—The Striped Cucumber Beetle. Pp. 7, figs. 2.
- Circular No. 32, revised.—The Larger Apple-tree Borers. Pp. 12, figs. 3.
- Circular No. 34.—House Ants. Pp. 4, figs. 3.
- Circular No. 35.—House Flies. Pp. 8, figs. 6.
- Circular No. 36.—The True Clothes Moth. Pp. 8, figs. 3.
- Circular No. 37, revised.—The Use of Hydrocyanic Acid Gas for Fumigating Greenhouses and Cold Frames. Pp. 10, figs. 3.
- Circular No. 38.—The Squash-vine Borer. Pp. 6, figs. 2.
- Circular No. 39.—The Common Squash Bug. Pp. 5, figs. 3.
- Circular No. 40.—How to Distinguish the Different Mosquitoes of America. Pp. 8, figs. 3.
- Circular No. 41.—Regulations of Foreign Governments Regarding Importation of American Plants, Trees, and Fruits. Pp. 4.
- Circular No. 42, revised.—How to Control the San Jose Scale. Pp. 6.
- Circular No. 43.—The Destructive Green Pea Louse. Pp. 8, figs. 3.
- Circular No. 44.—The Periodical Cicada in 1902. Pp. 4.
- Circular No. 45.—A New Nomenclature for the Broods of the Periodical Cicada. Pp. 8.
- Circular No. 46.—Hydrocyanic Acid Gas Against Household Insects. Pp. 4.
- Circular No. 47.—The Bedbug. Pp. 8, figs. 3.
- Circular No. 48.—The House Centipede. Pp. 4, figs. 2.
- Circular No. 49.—The Silver Fish. Pp. 4, figs. 2.
- Circular No. 50.—The White Ant. Pp. 8, figs. 4.
- Circular No. 51.—Cockroaches. Pp. 15, figs. 5.
- Circular No. 52.—The Lime, Sulphur, and Salt Wash. Pp. 8.
- Circular No. 53.—The Yellow-Winged Locust (*Camnula pellucida*). Pp. 3, fig. 1.
- Circular No. 54.—The Peach Tree Borer. Pp. 6, fig. 1.
- Circular No. 55.—Powder-Post Injury to Seasoned Wood Products. Pp. 5.

OFFICE OF EXPERIMENT STATIONS.

- Circular No. 25, revised.—Canaigre. Pp. 5.
- Circular No. 28, revised.—Broom Corn. Pp. 4.
- Circular No. 32, revised.—Report of Committee on Methods of Teaching Agriculture [first report]. Pp. 20.
- Circular No. 35.—Statistics of Land-Grant Colleges and Agricultural Experiment Stations, 1896. Pp. 18.
- Circular No. 37, revised.—Second Report of Committee on Methods of Teaching Agriculture. Pp. 4.
- Circular No. 39.—Methods of Teaching Agriculture [third report]. Pp. 7.
- Circular No. 40.—Land-Grant and Other Colleges and the National Defense. Pp. 15.
- Circular No. 41.—Fourth Report of Committee on Teaching Agriculture. Pp. 7.
- Circular No. 42.—A German Common School with a Garden. Pp. 7, figs. 2.
- Circular No. 43.—Food Nutrients—Food Economy. Pp. 6, diags. 2.
- Circular No. 44, revised.—Agricultural Experiment Stations in the United States. Pp. 11.
- Circular No. 45.—Fifth Report of Committee on Methods of Teaching Agriculture. Pp. 8.
- Circular No. 46.—The Functions and Uses of Food. Pp. 10.
- Circular No. 49.—Secondary Courses in Agriculture. Pp. 10.
- Circular No. 50.—Preliminary Plans and Estimates for Drainage of Fresno District, California. Pp. 9.
- Circular No. 51, revised.—List of State Directors of Farmers' Institutes, and Institute Lecturers of the United States. Pp. 23.
- Circular No. 52, revised.—A Few Good Books and Bulletins on Nature Study, School Gardening, and Elementary Agriculture for Common Schools. Pp. 4.
- Circular No. 53.—Report of the Committee on Rural Engineering. Pp. 10.
- Circular No. 54.—Report of Committee on Indexing Agricultural Literature. Pp. 2.
- Circular No. 55.—The Relation of the Natural Sciences to Agriculture in a four-year College Course. Pp. 15.
- Circular No. 56.—Constitution of the Association of Agricultural Colleges and Experiment Stations. Pp. 4.
- Circular No. 57.—Supplemental Report on Drainage in the Fresno District, California. Pp. 5.
- Circular No. 58.—Irrigation in the Valley of Lost River, Idaho. Pp. 24.

DIVISION OF FOREIGN MARKETS.

Circular No. 2.—American Dried Apples in the German Empire. Pp. 4.

Circular No. 7.—Extension of Markets for American Feed Stuffs. Pp. 8.

Circular No. 8.—The Manchester District of England as a Market for American Products. Pp. 8, fig. 1.

Circular No. 10.—Course of Wheat Production and Exportation in the United States, Canada, Argentina, Uruguay, Russia, and British India from 1880 to 1896. Pp. 8.

Circular No. 14.—Hamburg as a Market for American Products. Pp. 10.

Circular No. 15.—Exports of Cotton from Egypt. Pp. 7.

Circular No. 17.—United States Wheat for Eastern Asia. Pp. 8.

Circular No. 18.—Hawaiian Commerce from 1887 to 1897. Pp. 37.

Circular No. 19.—Austria-Hungary as a factor in the World's Grain Trade; Recent Use of American Wheat in that Country. Pp. 23.

Circular No. 20.—Agricultural Imports and Exports, 1893–1897. Pp. 15.

Circular No. 21.—Agricultural Imports and Exports, 1894–1898. Pp. 16.

Circular No. 22.—Agricultural Imports and Exports, 1895–1899. Pp. 16.

Circular No. 25.—Our Foreign Trade in Agricultural Products, 1902. Pp. 24.

Circular No. 26.—Belgium's Foreign Trade in Agricultural Products for 1902. Pp. 8.

BUREAU OF FORESTRY.

Circular No. 12.—Southern Pine: Mechanical and Physical Properties. Pp. 12, figs. 4.

Circular No. 15.—Summary of Mechanical Tests on Thirty-two Species of American Woods. Pp. 12.

Circular No. 21, revised.—Practical Assistance to Farmers, Lumbermen, and Others in Handling Forest Lands. Pp. 5.

Circular No. 22, second revision.—Practical Assistance to Tree Planters. Pp. 12, figs. 5.

Circular No. 23, revised.—Suggestions to Prospective Forest Students. Pp. 5.

Circular No. 24.—A New Method of Turpentine Orchardling. Pp. 8, figs. 3.

Circular No. 25.—Forestry and the Lumber Supply. Pp. 14.

Circular No. 26.—Forest Fires in the Adirondacks in 1903. Pp. 15, map.

Circular No. 27.—Reclamation of Flood Damaged Land in the Kansas River Valley by Forest Planting. Pp. 5, fig. 1.

DIVISION OF POMOLOGY.

Circular No. 1.—Nut Culture. Pp. 4.

Circular No. 2.—Prune Culture in the Pacific Northwest. Pp. 7, figs. 3.

DIVISION OF PUBLICATIONS.

Circular No. 1, revised.—Organization of the Department of Agriculture. Pp. 23.

No. 179.—List of Publications of the Department of Agriculture for Sale by the Superintendent of Documents. Pp. 51. (Revised and corrected to May 1, 1904.)

No. 247.—List of Farmers' Bulletins and Circulars of Information Available for Distribution. Pp. 28. (Revised and corrected to June 15, 1904.)

Monthly List of Publications.

This list is issued on the last day of each month and contains the titles of all publications issued by the Department of Agriculture during the month. The Monthly List is mailed regularly to all persons who request to have their names enrolled for that purpose.

OFFICE OF ROAD INQUIRY.

Circular No. 15.—An Act to Provide for the Construction of Roads by Local Assessment, County, and State Aid. Pp. 3.

Circular No. 17.—Origin and Work of the Darlington Road League. Pp. 6, figs. 3.

Circular No. 18.—Report of Committee on Legislation, Adopted by the State Good Roads Convention held in Richmond, Va., October 10 and 11, 1895. Pp. 6.

Circular No. 19.—Traffic on the Country Roads. Opinions of Representative Men. Pp. 4.

Circular No. 21.—Methods of Constructing Macadamized Roads. Pp. 12.

Extract from a report prepared by the Chief Engineering Inspector of the Local Government Board of Great Britain.

Circular No. 22.—Tennessee Road Circular. Pp. 3.

Circular No. 23.—Money Value of Good Roads to Farmers. Pp. 4.

Circular No. 24.—Highway Maintenance and Repairs. Pp. 16.

Highway taxation; comparative results of labor and money systems; contract system of maintaining roads.

Circular No. 26.—Going in Debt for Good Roads. Pp. 6.

Circular No. 27.—Cost of Hauling Farm Products to Market or to Shipping Points in European Countries. Pp. 12.

Circular No. 30.—Repairs of Macadam Roads. Pp. 14.

Circular No. 31.—Must the Farmer Pay for Good Roads? Pp. 40, figs. 50.

Circular No. 32.—State Aid to Road Building in Minnesota. Pp. 12, figs. 5.

Circular No. 35.—Road Improvement in New York. Pp. 15.

Circular No. 36, revised.—List of National, State, and Local Road Associations and Kindred Organizations in the United States. Pp. 13.

Circular No. 37.—The Railroads and the Wagon Roads. Pp. 4.

OFFICE OF THE SECRETARY.

Circular No. 3.—Progress of Southern Agriculture. Pp. 12.

Circular No. 4.—Experiments on Living Animals. Pp. 2.

Circular No. 5.—Civil Service in the Department of Agriculture. Pp. 4.

Circular No. 6.—Number, Status, and Compensation of Employees in the Department of Agriculture. Pp. 4.

Circular No. 7.—Possible Influence of Importation of Hawaiian Sugar on Beet-Sugar Production in the United States. Pp. 4.

Circular No. 8, revised.—Cooperative Grass and Forage Plant Investigations with State Experiment Stations. Pp. 16.

Circular No. 9.—Collection and Distribution of Grass Seed: Field Work. Pp. 11.

Circular No. 10.—Standards of Purity for Food Products. Pp. 13.

Circular No. 11.—Methods and Benefits of Growing Sugar-Beets. Pp. 27.

BUREAU OF SOILS.

Circular No. 3.—The Soils of the Pecos Valley, New Mexico. Pp. 7.

Circular No. 4.—Soils of Salt Lake Valley, Utah. Pp. 11, fig. 1.

Circular No. 5.—Bulk Fermentation of Connecticut Tobacco. Pp. 10.

Circular No. 8, revised.—Reclamation of Salt Marsh Lands. Pp. 10.

Circular No. 9.—Soil Survey Around Imperial, Cal. Pp. 20, figs. 2.

Circular No. 10.—The Use of Alkaline Waters for Irrigation. Pp. 4.

Circular No. 11.—Reclamation of Alkali Land at Fresno, Cal. Pp. 9.

Circular No. 12.—Reclamation of Alkali Land near Salt Lake City, Utah. Pp. 8, fig. 1.

Circular No. 13.—The Work of the Bureau of Soils. Pp. 13.

BUREAU OF STATISTICS.

Circular No. 1.—Acreage, Production, and Value of Principal Farm Crops in the United States, 1866 to 1895, with Other Data as to Cotton and Wool. Pp. 8.

Circular No. 2.—The Wheat Crop of the World for 1895. Pp. 2.

Circular No. 3.—The Farmers' Interest in Finance. Pp. 15, figs. 2.

Circular No. 6.—Cereal Crops of 1896. Pp. 12.

Circular No. 8.—The Cotton Crop of 1896-97. Pp. 14.

Circular No. 10.—The Brazos River (Texas) Flood of June-July, 1899, and its Effect on the Agriculture of the Submerged Region. Pp. 8.

- Circular No. 11.—The World's Grain Crops of 1899. Pp. 8.
 Circular No. 12.—Changes in Railroad Freight Classifications. Pp. 43.
 Circular No. 14.—Estimates of Russian Crops. Pp. 10, map.
 Circular No. 15.—Foreign Trade in Farm and Forest Products. Pp. 20.

DIVISION OF VEGETABLE PHYSIOLOGY AND PATHOLOGY.

- Circular No. 15.—Treatment for Sooty Mold of the Orange. Pp. 4.
 Circular No. 16.—Danger of Introducing a Central American Coffee Disease into Hawaii. Pp. 4.
 Circular No. 18.—A New Wheat Industry for the Semiarid West. Pp. 8, figs. 2.

MISCELLANEOUS CIRCULARS.

- Circular No. 1.—The Castor Oil Plant. Pp. 4.
 Circular No. 2.—The Mississippi River Flood. Pp. 6, fig. 1.
 Circular No. 3.—The Mississippi River Flood [second report]. Pp. 4, fig. 1.

EXTRACTS.

[Reprinted from the Yearbook for 1894.]

2. Education and Research in Agriculture in the United States. Pp. 35.
7. Mineral Phosphates and Fertilizers. Pp. 16, figs. 2.
10. Hawks and Owls from the Standpoint of the Farmer. Pp. 17, pls. 3, figs. 4.
15. Some Practical Suggestions for the Suppression and Prevention of Bovine Tuberculosis. Pp. 14.
16. Pasteurization and Sterilization of Milk. Pp. 30, figs. 28.
18. Pure Seed Investigations. Pp. 20, figs. 9.
19. The Grain Smuts: Their Cause and Prevention. Pp. 12, figs. 8.
20. Grasses as Sand and Soil Binders. Pp. 16, figs. 11.
21. Sketch of the Relationship Between American and Eastern Asian Fruits. Pp. 6.
25. State Highways in Massachusetts. Pp. 8.
27. Tobacco Soils of Connecticut and Pennsylvania. Pp. 13, figs. 7.
28. Truck Lands of the Atlantic Seaboard. Pp. 15, figs. 3.
29. Conditions in Soils in the Arid Region. Pp. 10, fig. 1.
30. Weather Conditions of the Crop of 1894. Pp. 5, figs. 2.

[Reprinted from the Yearbook for 1895.]

42. Work of the Department of Agriculture as Illustrated at the Atlanta Exposition. Pp. 20, fig. 1, pls. 3.
44. (Part 2.) Butter Substitutes. Pp. 8.

- 47. Small Fruit Culture for Market. Pp. 12, pl. 1.
- 50. Pear Blight: Its Cause and Prevention. Pp. 6.
- 55. Pineapple Industry in the United States. Pp. 14, pl. 1, figs. 6.
- 59. Four Articles on Grasses. Pp. 42, figs. 14.
 - 1. Canadian Field Peas.
 - 2. Grass Gardens.
 - 3. Forage Conditions of the Prairie Regions.
 - 4. Grasses of Salt Marshes.

[Reprinted from the Yearbook for 1896.]

- 60. Timothy in the Prairie Region. Pp. 8, figs. 2.
- 62. The Country Slaughterhouse as a Factor in the Spread of Disease. Pp. 12.
- 66. The Blue Jay and Its Food. Pp. 10, figs. 3.
- 68. Seed Production and Seed Saving. Pp. 10, figs. 8.
- 69. Superior Value of Large and Heavy Seed. Pp. 18, figs. 10.
- 73. The Use of Steam Apparatus for Spraying. Pp. 20, pls. 2, figs. 15.
- 75. Asparagus Beetles. Pp. 12, figs. 6.
- 78. Agricultural Research and Education in Belgium. Pp. 10.
- 83. Influence of Environment on the Origination of Plant Varieties. Pp. 18, figs. 8.
- 85. Methods of Propagating the Orange and Other Citrus Fruits. Pp. 18, figs. 13.
- 87. Pruning and Training Grapevines. Pp. 44, figs. 24.
- 88. An Ideal Department of Agriculture and Industries. Pp. 12.

[Reprinted from the Yearbook for 1897.]

- 90. Division of Agrostology. Pp. 16.
- 91. Lawns and Lawn Making. Pp. 18, pls. 7.
- 93. Bureau of Animal Industry. Pp. 23.
- 94. Utilization of By-Products of the Dairy. Pp. 20.
- 97. Division of Botany. Pp. 10.
- 101. Danger of Importing Insect Pests. Pp. 24, figs. 19.
- 102. Office of Experiment Stations. Pp. 9.
- 103. Every Farm an Experiment Station. Pp. 14.
- 105. The Needs and Requirements of a Control of Feeding Stuff. Pp. 8.
- 106. The Agricultural Outlook of the Coast Region of Alaska. Pp. 24, pls. 4.
- 108. Office of Fiber Investigations. Pp. 12.
- 109. Present Status of Flax Culture in the United States. Pp. 16.
- 110. Section of Foreign Markets. Pp. 9.
- 113. Experimental Gardens and Grounds. Pp. 25.

- 114. The Library [of the U. S. Department of Agriculture]. Pp. 4.
- 117. The Division of Publications [of the U. S. Department of Agriculture]. Pp. 16.
- 122. Agricultural Production and Prices. Pp. 30.
- 124. Hybrids and Their Utilization in Plant Breeding. Pp. 38, figs. 12, pls. 4.
- 126. Review of Weather and Crop Conditions, Season of 1897. Pp. 21, figs. 2.

[Reprinted from the Yearbook for 1898.]

- 127. Sand-Binding Grasses. Pp. 18, pls. 3, figs. 11.
- 128. Millets. Pp. 24, pls. 2, figs. 6.
- 129. Forage Plants for Cultivation on Alkali Soils. Pp. 16, figs. 4.
- 130. Cattle Dipping: Experimental and Practical. Pp. 20, figs. 2.
- 131. The Preparation and Use of Tuberculin. Pp. 10, fig. 1.
- 132. The Danger of Introducing Noxious Animals and Birds. Pp. 24, pl. 1, figs. 6.
- 133. Birds as Weed Destroyers. Pp. 12, figs. 7, pl. 1.
- 134. Weeds in Cities and Towns. Pp. 8, figs. 5.
- 135. Can Perfumery Farming Succeed in the United States? Pp. 22, figs. 7.
- 136. Grass Seed and Its Impurities. Pp. 22, pls. 5, figs. 2.
- 137. Utilization of Residues from Beet-Sugar Manufacture in Cattle Feeding. Pp. 8.
- 139. Insects Injurious to Beans and Peas. Pp. 28, figs. 17.
- 140. Some Types of American Agricultural Colleges. Pp. 18, pls. 7.
- 141. Some Results of Dietary Studies in the United States. Pp. 14.
- 143. Notes on Some Forest Problems. Pp. 12, pls. 4.
- 144. Work of the Division of Forestry for the Farmer. Pp. 12, pls. 3, figs. 2.
- 147. The Present Condition of Grape Culture in California. Pp. 12.
- 148. Notes on Some English Farms and Farmers. Pp. 7.
- 149. Steel-Track Wagon Roads. Pp. 6, pls. 3, fig. 1.
- 150. Construction of Good Country Roads. Pp. 8, pls. 2.
- 153. The Soluble Mineral Matter of Soils. Pp. 10.
- 156. Agricultural Statistics. Pp. 51.
- 159. Improvement of Plants by Selection. Pp. 22, pls. 2, figs. 3.
- 161. Cyclones, Hurricanes, and Tornadoes. Pp. 10.
- 162. The Hawaiian Islands. Pp. 20.

[Reprinted from the Yearbook for 1899.]

- 164. Statistical Matter Relating to Principal Crops, Farm Animals, Transportation Rates, etc. Pp. 91.

165. Development of Knowledge Concerning Animal Diseases. Pp. 42.
166. Administrative Work of the Federal Government in Relation to the Animal Industry. Pp. 24.
167. Dairy Development in the United States. Pp. 22, pls. 8, figs. 12.
168. Development of the Nutrition Investigations of the Department of Agriculture. Pp. 12.
169. Soil Investigations in the United States. Pp. 12.
170. Agricultural Education in the United States. Pp. 34.
171. Progress in Economic Entomology in the United States. Pp. 22, pl. 1.
172. Progress of Road Building in the United States. Pp. 14, pls. 4.
175. Agricultural Experiment Stations in the United States. Pp. 36, pls. 3.
176. Progress of Economic and Scientific Agrostology. Pp. 20, figs. 5.
178. Development of Agricultural Libraries. Pp. 22, pls. 4, fig. 1.
180. Relation of Chemistry to Progress of Agriculture. Pp. 58, figs. 2.
182. Progress of Plant Breeding in the United States. Pp. 26, pls. 3, figs. 2.
184. Seed Selling, Seed Growing, and Seed Testing. Pp. 26, pls. 5, fig. 1.
186. Progress of Forestry in the United States. Pp. 14, pls. 4, fig. 1.
187. The Practice of Forestry by Private Owners. Pp. 14, pls. 4.
188. Growth of the Tobacco Industry. Pp. 12, pls. 7.
189. Progress in the Treatment of Plant Diseases in the United States. Pp. 10, figs. 2.
190. Succulent Forage for the Farm and Dairy. Pp. 14, pls. 2.
191. Progress of Commercial Growing of Plants Under Glass. Pp. 16, pls. 3, figs. 6.

[Reprinted from the Yearbook for 1900.]

192. Rabies: Its Cause, Frequency, and Treatment. Pp. 36.
193. Agricultural Education in France. Pp. 16.
194. The Food of Nestling Birds. Pp. 26, pls. 5, figs. 9.
195. Successful Wheat Growing in Semiarid Districts. Pp. 14, pls. 4.
196. Smyrna Fig Culture in the United States. Pp. 28, pls. 8, figs. 7.
197. How Birds Affect the Orchard. Pp. 14, figs. 5.
198. A Directory for Farmers. Pp. 51.
199. Dairy Products at the Paris Exposition of 1900. Pp. 26, pls. 5.
200. Statistical Matter Relating to Principal Crops, Farm Animals, etc. Pp. 113.
201. Practical Irrigation. Pp. 22, figs. 9.
202. Amplification of Weather Forecasts. Pp. 8, pls. 3, fig. 1.

- 203. Commercial Plant Introduction. Pp. 14.
- 204. The selection of Materials for Macadam Roads. Pp. 8.
- 206. Some Poisonous Plants of the Northern Stock Ranges. Pp. 20,
pls. 3, figs. 4.
- 208. Fungous Diseases of Forest Trees. Pp. 12, pls. 5.
- 209. The Influence of Rye on the Price of Wheat. Pp. 16.
- 210. Mountain Roads. Pp. 16, pls. 3.
- 211. The World's Exhibit of Leaf Tobacco at the Paris Exposition.
Pp. 10, pls. 2.
- 212. Forest Extension in the Middle West. Pp. 12, pls. 4.
- 213. The Value of Potatoes as Food. Pp. 12, figs. 3.
- 214. Practical Forestry in the Southern Appalachians. Pp. 12, pls. 6.
- 215. Commercial Pear Culture. Pp. 28, pls. 3.
- 217. Development of the Trucking Interests. Pp. 16.
- 218. The Date Palm and Its Culture. Pp. 38, pls. 9, figs. 7.
- 219. Free Delivery of Rural Mails. Pp. 16, pls. 4, figs. 2.
- 220. Testing Commercial Varieties of Vegetables. Pp. 8.
- 221. The Use and Abuse of Food Preservatives. Pp. 10.
- 222. The Influence of Refrigeration on the Fruit Industry. Pp. 20,
pls. 5.
- 223. Our Native Pasture Plants. Pp. 18, pls. 4, figs. 11.

[Reprinted from the Yearbook for 1901.]

- 225. The Relation of Nutrition to the Health of Plants. Pp. 22, pls. 7.
- 227. The Prairie Dog of the Great Plains. Pp. 14, pls. 3, figs. 2.
- 229. Little-Known Fruit Varieties Considered Worthy of Wider Dis-
semination. Pp. 12, pls. 7.
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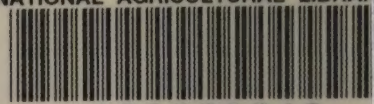
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